



Hepatitis B

Health Education Facts

What is Hepatitis B?

Hepatitis B (HBV) is a virus that affects the liver and is one of the most common, serious infectious diseases in the world. There are more than 300 million people infected with HBV worldwide; an estimated 1.25 million Americans are chronically infected, and there are 140,000-320,000 infections a year in the United States. There are 4,000-5,000 deaths each year in the U.S. due to complications from HBV. Twenty-five percent of infants infected at birth die from hepatitis B infection. Yet hepatitis B can be prevented with a safe and effective vaccine.

What are the symptoms of hepatitis B?

About half of the people who are infected will have symptoms, although many people think they have the flu and do not attribute their symptoms to HBV infection. The usual signs and symptoms of HBV include fever, fatigue, dark urine, muscle or joint pain, loss of appetite, nausea, vomiting, or jaundice (yellow skin and eyes).

What happens after HBV infection?

After infection, about 90 percent of people recover, develop antibodies to the virus, and cannot spread the disease to others. They totally clear the virus from their bodies.

Five to 10 percent cannot clear the virus or develop antibodies and become carriers that they infect other people, often without knowing it. The development of chronic disease varies inversely with age: 90% of infants born to infected mothers, 30% of children between ages 1-5, and 6% of those over 5 years of age will develop chronic disease. Chronic carriers will usually have ongoing inflammation of the liver. Because the hepatitis B virus steadily attacks the liver, chronic carriers have an increased risk of developing liver disease such as cirrhosis or liver cancer.

A very small number, about one percent, develop life-threatening acute fulminant hepatitis. These people may suddenly collapse with fatigue, have yellowing of the skin and eyes and develop swelling in their abdomen. Acute fulminant hepatitis develops very suddenly and can be fatal if not treated immediately.

What precautions should carriers take?

Carriers of hepatitis B may experience no health problems, or over a period of years may develop liver disease. They should:

- Have regular blood tests and check-ups to determine whether the liver has been affected,
- Drink as little alcohol as possible
- Avoid acetaminophen medications,
- Not donate blood, semen, or other body organs or tissue
- Advise health care workers, including the dentist, that they are HBV positive
- Make sure steady sex partners and people living in the same household are vaccinated
- Use a condom for sex with all partners unless they have been vaccinated.

Who is at risk?

The following is a list of people at the highest risk of becoming infected with HBV:

- Sexually active adults and teenagers, especially those who have had more than one sexual partner in the last 6 months and those who have had unprotected sex,
- Health, dental, and emergency care personnel. HBV is both highly contagious and highly resilient. While the AIDS virus can live only up to 24 hours in dried blood, HBV can survive for at least a week.
- People from countries where HBV is more common—Southeast Asia, Africa, the Middle East, and Pacific Islands, and people who adopt children from Asia, parts of Africa, South America, and Eastern and Mediterranean Europe.
- Injecting drug users.
- Parents, spouses, and siblings, of HBV carriers or those in close contact with HBV carriers.
- Children born to mothers who are carriers of HBV.
- Men who have sex with men.
- People who get tattoos or body piercing with unsterile needles and tools.
- People who travel to high-risk countries where more than 2% of the population are HBV carriers, like Asia, Africa, South America, and Eastern and Mediterranean Europe.

Transmission

The hepatitis B virus is spread by infected blood and body fluids, sexual contact with an infected person, and from an infected mother to her child during birth. The virus is transmitted by blood-to-blood contact or by sexual intercourse. The main risk of blood-to-blood contact is through sharing needles and tools by injecting drug users. To avoid contracting Hepatitis B, persons should:

- Not share needles or any other injecting equipment,
- Not share personal items, e.g. razors, toothbrushes,
- Be careful not to allow blood or body fluids to come into contact with intact skin or mucous membranes,
- Use condoms with new sex partners. Oral sex, especially swallowing semen from an infected person, may transmit hepatitis B.
- Verify the infection control practices of tattoo, body piercing and acupuncture establishments prior to receiving procedures.

In addition,

- Women who are carriers may infect their babies before or at birth.

Vaccination Recommended

Routine vaccination of children 0-18 years of age is recommended. In addition, persons in the high risk groups above, or who are in a regular sexual relationship with a person in a high risk group, should be vaccinated.

The vaccination involves three injections over six months; this course needs to be completed for maximum protection. Vaccinated persons may have reactions such as a sore arm, swelling around the vaccine site, headache, diarrhea or they may simply feel unwell. Mostly there is little reaction.

Infants born to infected mothers should be given hepatitis B immune globulin (HBIG) and the first dose of vaccine concurrently, but at different sites, within 12 hours of birth. The second dose should be given at 1-2 months and the third dose at 6 months. Testing for HBsAg and anti-HBc should be performed at 9-15 months to verify vaccine therapy. Infants HBsAg negative and anti-HBc positive are protected. Infants HBsAg negative and anti-HBc negative should be reimmunized.

Vaccinated persons will be protected against hepatitis B infection; however, they will not be protected against hepatitis C or HIV, and any other sexually transmitted infection or other bloodborne infection.

For more information on Viral Hepatitis:

Access the CDC website at:
<http://www.cdc.gov/hepatitis/>

or call the Hepatitis Information Line at:
1-888-4HEPCDC
1-888-443-7232

or write
Centers for Disease Control and Prevention
Hepatitis Branch, Mailstop G37
Atlanta, GA 30333

Information Provided by:
Bureau of
Epidemiology and Disease Prevention
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